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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/929,465	08/14/2001	Jeff Kirsner	HALB:020	9062

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EXAMINER

TUCKER, PHILIP C

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 04/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/929,465	<b>Applicant(s)</b> KIRSNER ET AL.	
	<b>Examiner</b> Philip C Tucker	<b>Art Unit</b> 1712	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 12/23/03.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,3-16,18-41,43-51 and 53-89 is/are pending in the application.
- 4a) Of the above claim(s) 59-80 and 86-89 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,5-16,18-41,43-51,53-58 and 81-85 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                                                   |                                                                                         |
|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                              | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## **DETAILED ACTION**

### **Claims Interpretation**

1. Applicants claims teach an isomerized olefin, without teaching the scope or specific structure of such olefin. Applicants specification teaches that the isomerized olefin may be a linear alpha olefin, although preferably not so (see applicants specification at page 7, lines 1-3). In view of recent court decisions such as Liebel-Flarshelm Co. v. Medrad Inc. F.3d (Federal Cir. February 11, 2004), in the interpretation of claims, a preference cannot be imported from the specification. Applicants specification does not limit the isomerized olefins to internal olefins as suggested in applicants arguments, but only teaches that they are not preferred.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 15, 16, 28, 40, 50, 51, 53-55, 57 and 58 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 15, 28, 40 and 50 the terms "selected from the group comprising" or "selected from the group consisting essentially of" is used. Such is improper Markush terminology, since such would include other compounds not listed in the Markush grouping. The proper term "selected from the group consisting of" or equivalent should be used (see MPEP 2173.05 (h)). Dependent claims fall herewith.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 5-9, 12-14, 18-22, 25, 26, 81 and 82 are rejected under 35

U.S.C. 102(b) as being anticipated by Mueller (5869434).

Mueller teaches a drilling fluid which comprises an ester and linear alpha olefin as continuous phase, wherein the the ester may be a product such as PETROFREE, or rapeseed oil (see the examples). A linear alpha olefin may be made by isomerization, thus applicants claims do not distinguish absent further definition of the olefin structure. Applicants method of making the ester does not distinguish, since in product by process claims, only the product is examined (In re Thorpe 227 USPQ 964).

6. Claims 50, 51, 53-55, 57, 58 and 85 are rejected under 35 U.S.C. 102(e) as being anticipated by Mueller (6165946).

Art Unit: 1712

Mueller teaches a drilling fluid which comprises esters of 2-ethyl-hexanol alcohols and rapeseed oil (see Example 13). The use of the term "selected from the group consisting essentially of" opens the claim to other glyceride triesters other than those listed, and thus does not exclude rapeseed oil since the fluid can be used for the same purpose. Applicants method of making the ester does not distinguish, since in product by process claims, only the product is examined (In re Thorpe 227 USPQ 964).

7. Claims 1, 5-9, 12-14, 18-22, 25, 26, 50, 51, 53-55, 57, 58, 81, 82 and 85 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 95/26386.

WO teaches an invert emulsion drilling fluid which comprises a triglyceride ester oil in admixture with another ester or an alpha olefin, wherein the triglyceride ester and ester are within the scope of the present invention (see page 4, lines 8-15, and page 4, line 29 – page 5, line 9). Ultidrill taught in Example 9 is a mixture of C14-C16 alpha olefins. A linear alpha olefin may be made by isomerization, thus applicants claims do not distinguish absent further definition of the olefin structure. Applicants method of making the ester does not distinguish, since in product by process claims, only the product is examined (In re Thorpe 227 USPQ 964).

8. Claims 1, 3, 5-9, 12-16, 18-22, 25-28, 30-33, 36-38, 43, 44, 48-51, 53, 54, 57, 58 and 81-85 are rejected under 35 U.S.C. 102(e) as being anticipated by Patel (US 2001/0009890 A1).

Patel teaches an invert emulsion drilling fluid which comprises esters and a C16-C18 isomerized olefin (see the examples). Patel further teaches the combination of various esters and hydrocarbons, such as mineral oils (see claims 1 and 9). Such mineral oils would would comprise paraffins according to the present invention. Combinations of glycerides of fatty acids and esters are taught at paragraph [0018]. Applicants method of making the ester does not distinguish, since in product by process claims, only the product is examined (In re Thorpe 227 USPQ 964).

### ***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claims 1, 10, 11, 14, 23, 24, 38-41, 45-47, 50, 54-56, 81, 82, 84 and 85 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patel (US 2001/0009890 A1) in view of Mueller (6165946) and Rines H935.

Patel teaches an invert emulsion drilling fluid which comprises esters and a C16-C18 isomerized olefin (see the examples). Patel further teaches the combination of various esters and hydrocarbons, such as mineral oils (see claims 1 and 9). Such mineral oils would would comprise paraffins according to the present invention. Combinations of glycerides of fatty acids and esters are taught at paragraph [0018]. Patel differs from the present invention in that the use of 2-ethylhexanol is not disclosed,

Art Unit: 1712

and the specific composition of the mineral oil is not disclosed. The use of 2-ethylhexanol would be obvious to one of ordinary skill in the art, given the teaching of Patel that alcohols of C1-12 length may be used in the formation of the asters (claim 1), particularly in view of the teaching of Mueller that esters made from 2-ethylhexanol may be used in invert emulsion drilling fluids (see first Table in column 22). The use of low aromatic mineral oils as the continuous phase of an invert emulsion drilling fluid is taught by Rines (column 4, line 45-58 shows less than 0.5 wt% aromatic), which improves environmental compatibility. Thus the use of a low aromatic mineral oil in the invert emulsion of Patel, such as that taught by Rines, comprising paraffins and olefins of low carbon chain length in order to protect the environment would be an obvious variation to one of ordinary skill in the art, particularly in view of the teaching of a low toxicity mineral oil by Patel [0069].

11. Claims 27-37 and 83 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (5569642) in view of Mueller (6165946).

Lin teaches the use of a mixture of linear and branched paraffins for use as the continuous phase of a drilling fluid. Lin teaches that the paraffin mixture may be used in combination with an ester in order to improve the performance of the fluid or lower costs (column 3, lines 39-43). Lin differs from the present invention in not disclosing an example of such esters. Mueller teaches the use of ester oils as the continuous phase of a drilling fluid, which comprises esters of 2-ethylhexanol (column 22). It would be obvious to one of ordinary skill in the art to use known drilling fluid ester formulations,

such as that of Mueller, in the drilling fluid of Lin, given the teaching of Lin that esters may be used therein in order to improve drilling performance, or lower cost.

12. Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

13. Applicants arguments have been considered but are not deemed persuasive. Applicant has argued that the isomerized olefins are different from linear alpha olefins taught by the prior art. However, applicants specification teaches that the isomerized olefin may be a linear alpha olefin, although not preferably so (see applicants specification at page 7, lines 1-3). In view of recent court decisions such as Liebel-Flarshelm Co. v. Medrad Inc. F.3d (Federal Cir. February 11, 2004), in the interpretation of claims, a preference cannot be imported from the specification. Applicants specification does not limit the isomerized olefins to internal olefins as suggested in applicants arguments, but only teaches that they are not preferred. Applicants should amend the claims to positively recite that the olefins are internal olefins in order to be distinguishing on this point. Official notice is taken of patents such as Allen (US 5191145), Paludetto (US 5955640), Slaugh (US 4915794) and Myers (US 4229610) which all teach that alpha olefins may be formed by isomerization of internal olefins.

Applicant has also argued that the use of the term "selected from the group consisting essentially of" may be distinguishing in certain cases. Such is not deemed



Art Unit: 1712

persuasive since 1) such is an improper Markush term, and 2) such is open ended as long as the nature of the product is not changed. In the present cases a drilling fluid invert emulsion is still formed by the components of the prior art. Mueller and WO '486 are thus not distinguished.

In traversing the rejection over Patel under 35 USC 102, applicants arguments are that Patel teaches fluids with "negative alkalinity" and are thus not identical with the present invention. Patel however meets every limitation of the present claims and teaches fluids with "negative alkalinity", and comparative fluids which comprise lime and are thus positively alkaline (see Table 7). There is no teaching in applicants claims which distinguish over the teachings of Patel, since Patel meets every limitation of applicants claims. With respect to the 35 USC 103 rejection over Patel, applicant has argued that an obvious to try standard has been used. The use of low aromatic mineral oils in drilling fluid to protect the environment has been a well established practice in the art. Thus the use of a low aromatic mineral oil in the invert emulsion of Patel, such as that taught by Rines, comprising paraffins and olefins of low carbon chain length in order to protect the environment would be an obvious variation to one of ordinary skill in the art, particularly in view of the teaching of a low toxicity mineral oil by Patel [0069]. Applicant has argued that the esters used in the present invention differ from those used by Patel, and a different problem is solved by using them. However, the scope of the esters used by Patel clearly overlaps in scope with those used by the present invention. Even though Patel may try to solve a particular problem, case law has held

that the difference for adding a material to a composition is not a patentable distinction (In re Lindner 173 USPQ 580, In re Mod 168 USPQ 281).

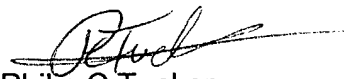
Applicant has also argued the validity of the rejection of Lin in view of Mueller. Lin clearly provides motivation to use esters, given the teaching of Lin that esters may be used therein in order to improve drilling performance, or lower cost. One of ordinary skill in the art would clearly look to the teachings of the prior art of invert emulsion drilling fluids to determine the scope of the esters which may be used in the drilling fluid of Lin. One of ordinary skill in the art does not operate in a vacuum devoid of the prior art teachings. Unlike Lindemann Maschinefabrik, or Texas Instruments v. US intl Trade Commission cited by applicant, Lin clearly provides motivation, such as improved drilling performance to look to the prior art to seek esters for such improvement. Applicant has argued that the examiner must show that the skilled artisan, confronted with the same problem, would select the same elements as in the manner claimed. Again, case law has held that the difference for adding a material to a composition is not a patentable distinction (In re Lindner 173 USPQ 580, In re Mod 168 USPQ 281). Applicant has also argued that the invention as a whole must be considered. Applicant has not submitted any secondary considerations, such as superior and unexpected results which could help to distinguish the current claims. The rejections are thus maintained.

Art Unit: 1712

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip C Tucker whose telephone number is 571-272-1095. The examiner can normally be reached on Monday - Friday, Flexible schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Philip C Tucker  
Primary Examiner  
Art Unit 1712

PCT-2989